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MARTIN MARIETTA LABORATORIES • BALTIMORE

1450 SOUTH ROLLING ROAD BALTIMORE, MARYLAND 21227-3888 TELEPHONE: (410) 204-2000 FAX: (410) 204-2100

June 3, 1994

Refer to:

ONR-94-0006

To:

Scientific Officer

Office of Naval Research

Ballston Tower One 800 N. Quincy St.

Arlington, VA 22217-5660

Attn:

CC:

Stephen Newfield/Code 4522

Subject:

Monthly Report, Contract N00014-92-C-0214

DTIC ELECTE JUN 2 9 1994

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Enclosed please find one (1) copy of the Monthly Technical Report for the above said contract, covering the period through May 31, 1994. Also enclosed is one (1) copy of the Monthly Costs & Expenditure Report for the period ending 5/29/94. Please contact this office at (410)204-2332 if you have any questions regarding the enclosed information.

Sincerely,

James M. Watts

Contracts

Accesion For

NTIS CRA&I DTIC TAB

Unannounced Justification

Availability Codes

Dist

Avail and/or Special

A-1

94-18922

Scientific office(N00014)

Director, NRL (N00173) Code 2627

ACO (S2101A)

K. Bridger, file

DTIC

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Contract progress and activities since CDRL A001.19.

Summary of progress

- Two of the 3/4-sized and one of the full-sized actuator modules has been polished and is presently being terminated.
- After speaking with Andy Ritter at AVX Corp., we are currently experimenting with a different termination procedure to be used with the actuator modules. Rather than solder directly to the ceramic (which can cause cracking due to localized heating) we will be soldering a brass strip to the ceramic and then leads will be soldered to the brass.
- Three full-sized actuator modules are presently in burnout and are scheduled to be out this week.

Telephone calls, trips, and significant results

None

Results bearing on prior problem areas

· No problem areas.

Programmatic changes

• We have requested (as per a letter to Jon Wester, Procuring Contracting Officer) a two week extension to the date for actuator module deliverables. Hence we are anticipating a delivery date of June 30, 1994.

Technical or scheduling problem areas

None

Contract and cost schedule status

- Expended funds as of 31 May 1994, including expenditures prior to 23 July, were \$280K against a current budget of \$275K.
- A revised cost schedule, beginning a the 23 July program restart, and reflecting the \$114K funding gap
 is attached.

Plans for June 1994

- We will begin and electrically and mechanically testing the two 3/4-sized and our first full-sized actuator modules.
- The actuator modules which survive burnout will be sintered, polished, terminated, and electrically and mechanically tested.
- · We will begin preparing the final report.

Preparers

Dr. Keith Bridger, Program Manager (410) 204-2229

(email: BRIDGER@mml.mmc.com)

Ms. Lori Jones, Principle Investigator (410) 204-2223

(410) 204-2100 FAX

DTIC QUALITY COOPLETED &

MML TM 94-11

COLLOCATED TUNABLE WAVENUMBER SENSOR/ACTUATORS FOR SMART STRUCTURES

N00014-92-C-0214

CDRL A001.20

Covering the period: 1 May to 31 May 1994

Submitted to:

Office of Naval Research Scientific Officer Code: 1221

Submitted by:

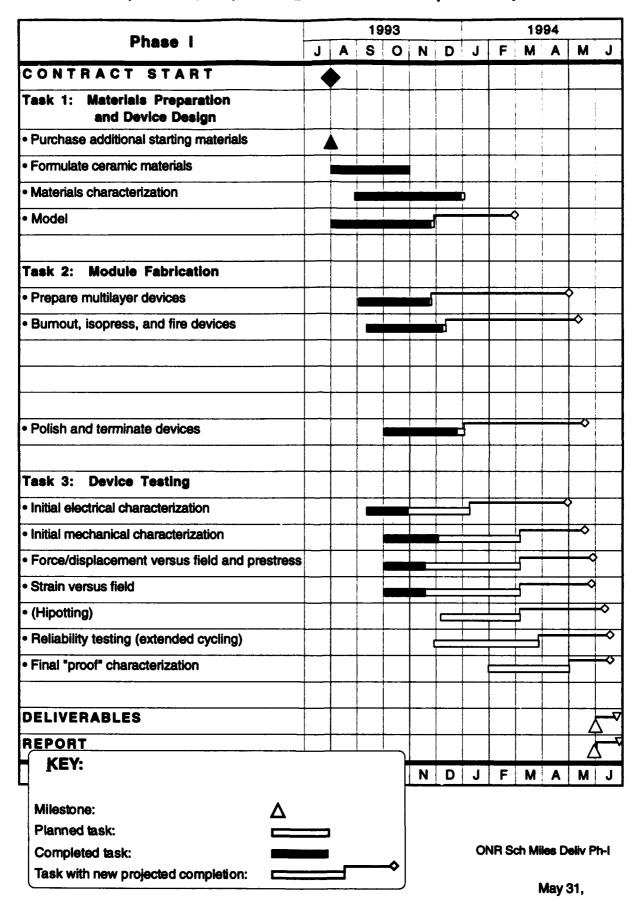
K. Bridger L. Jones DTIC QUALITY INSPECTED &

MARTIN MARIETTA CORPORATION

Martin Marietta Laboratories 1450 South Rolling Road Baltimore, Maryland 21227-3898 (410) 204-2000

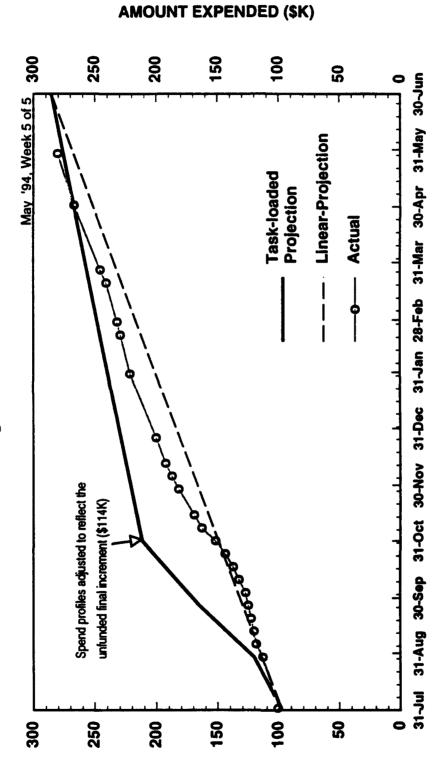
June 3, 1994

SCHEDULE, MILESTONES, AND DELIVERABLES -- Updated May 4, 1994



EXPENDITURE CHART

3117-000 ONR Co-Fired High-Force Actuators



AMOUNT EXPENDED (\$K)

MML TM 94-11

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K. Bridger
L. Jones

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Martin Marietta Laboratories 1450 South Rolling Road Baltimore, Maryland 21227-3898 (410) 204-2000

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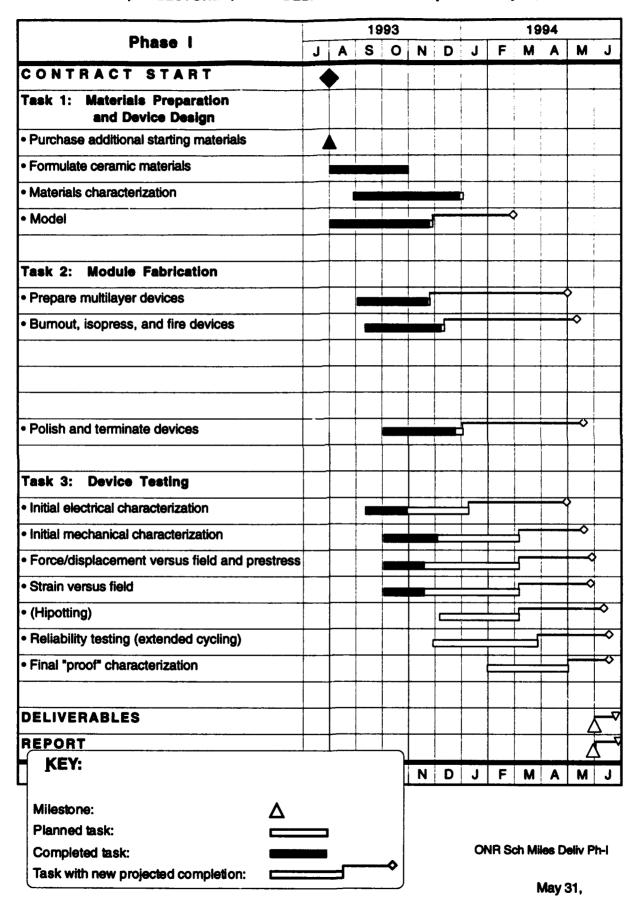
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